# Global Hydrology Resource Center
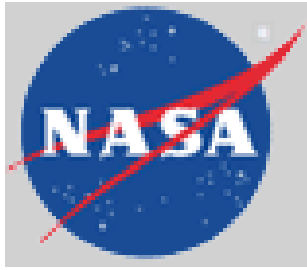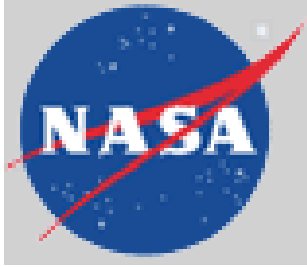
Marilyn Drewry
University of Alabama in Huntsville

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(256) 961-7808

# GHRC Organization

| | | |
|---|---|---|
| **GHRC Managers** | Michael Goodman | NASA |
| | Danny Hardin | UAH |
| **ITSC/UAH Director** | Dr. Sara Graves | UAH |
| **GHRC Web Team Lead** | Danny Hardin | UAH |
| **GHRC Data Management Lead** | Marilyn Drewry | UAH |
| **GHRC/ITSC Development Lead** | Helen Conover | UAH |
| **Subsetting** | Matt Smith | UAH |
| **Data Mining,Web Services** | Ken Keiser | UAH |
| **ESML** | Dr. Rahul Ramachandran | UAH |

# GHRC Organization

| | |
|---|---|
| **IMS Server** | Marilyn Drewry, Mary Nair |
| **Valids** | Marilyn Drewry |
| **Guide, Statistics** | Mary Nair |
| **Guide Author** | Richard Wohlman |
| **CINTEX** | Helen Conover |
| **User Services** | Sherry Harrison, Richard Wohlman |
| **Archive** | Steve Jones |

*Home office:*      *Information Technology and System Center:* **256-824-6868**
*GHRC*      **256-961-7700**

*Emails***:**      **michael.goodman@msfc.nasa.gov**
**<name>@itsc.uah.edu**
**(sgraves, dhardin, hconover, mdrewry, msmith, sjones, kkeiser, rramachandran, mnair, sharrison, rwohlman)**
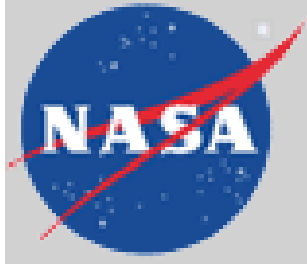
# GHRC Planned Datasets
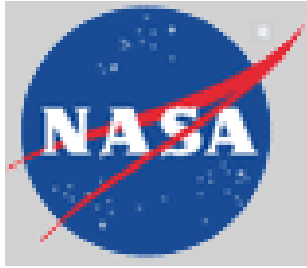
**CAMEX-4**          **Spring-Summer 2002**

~ 42 datasets

15 completed

~27 more

**ACES**          **Fall  2002**

~ 8 datasets

# GHRC Valids and Guide Issues

**GUIDE**

**Guide System**

- Ready to go to new System
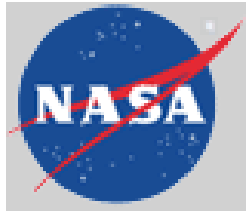- New Datasets are not in old system

**VALIDS**

**Inter-DAAC Coordination of Valids and Definitions**

- Notice of Recent Keyword Changes ( ~ GCMD Page)
- Notice of Changed Definitions
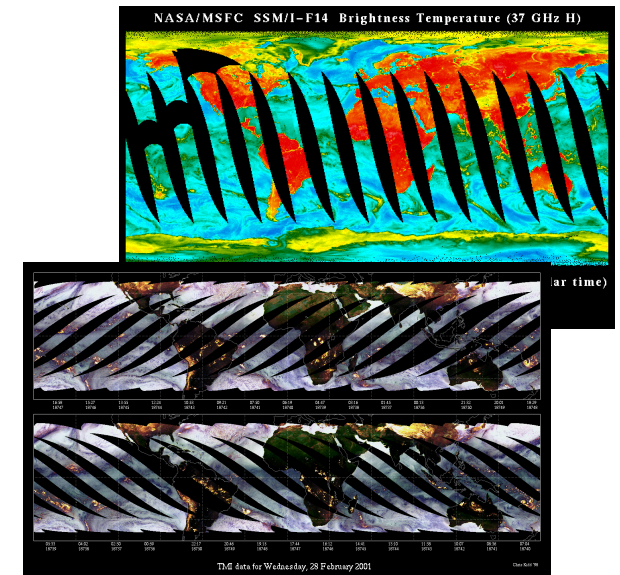- Suggest use of AMS definitions of meteorological terms

**GCMD Coordination**

- Schedule of valids review/approval

# Some of
# What's Happening at GHRC

**Reprocessing**   SSM/I Tb and products F13, 14, 15

TRMM Microwave Imager (TMI)

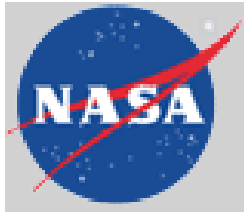Wentz Ocean Products

**OTTER**   Order Tracking Tool and Error Reporting System v1.0

**Migrations**   GHRC Archive, Database platform and version migrations

**Statistics**   SCRS, EDGRS, ESIP

Michael Goodman, Marilyn Drewry, UAH                           EDG meeting, June 4-5, 2002

# GHRC Tools

**ESML**   **Earth Science Markup Language\***
*http://esml.itsc.uah.edu*

**Subsetting**   **HSA\* – HEW Subsetting Appliance\***

HEW+infrastrucure software for ECS

(installed for DAAC Ops  at NSIDC, EDC; soon at GSFC)

HEW\*  - Dataset Independent Subsetter for

**HDF-EOS files**

**Modis-land, Modis-air**

**Stitcher**

**SPOT\***

**SSM/I Subsetter**          **NLDN Data Locator and Subsetter**

**SCF - Subsetter/Format Converter\***

*http://subset.itsc.uah.edu/*

**Data Mining**   ADaM    - Algorithm Develop and Mining System
*http://datamining.itsc.uah.edu*

**Coincidence**   Satellite Coincidence Search Engine
*http://ghrc.msfc.nasa.gov/ghrc/search.html*

**OTTER**   Order Tracking Tool and Error Reporting System, v1.0
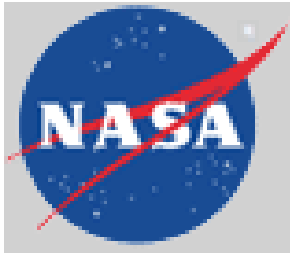
# GHRC Systems

| Microwave | Dobbs | Moby | Prodigy |
|---|---|---|---|
| SGI Origin 2000 | SGI Origin 2000 | PC- Dell | PC- Dell |
| IRIX 6.5.12 | IRIX 6.5.12 | PowerEdge 2450 | PowerEdge 2450 |
| Oracle 8.0.5.0.0 | | RedHat 6.2> | RedHat 6.2 |
| EDG Client, Server | Archive Processing | *7.3 in 2 months* | |
| EDG Guide Server | | Data Server | Database Server |
| HyDRO Web Server | | FTP | Oracle 8i |
| EDG Database > migrating | | | |
| OpenSSH 3.1 | OpenSSH 3.1 | OpenSSH 3.1 | |
| Apache 1.3.20 | Apache 1.3.20 | Apache 1.3.20 | |

# 4th Convection and Moisture Experiment

- ## **CAMEX-4 Hurricane Field Experiment**
  - 16 Aug to 24 Sep 2001 based in Jacksonville FL
  - Penetrate hurricanes from the Caribbean and along the east coast of US
  - Instrumented ER-2 and DC-8 aircraft, Aerosonde uninhabited aerial vehicle, satellite, and surface data sets
    - Airborne dropsondes and surface rawinsondes, surface and airborne radar reflectivity and precipitation products, passive microwave atmospheric and hydrological data sets, atmospheric electric fields, cloud microphysics, atmospheric state parameters (e.g., temperature, humidity, etc.), atmospheric measurements from airborne lasers, and satellite subsets from TRMM TMI & PR, GOES, MODIS, QuikSCAT.

# ALTUS Cumulus and Electrification Study

## ACES

- July-Aug 2002 based at Key West, FL

- Uninhabited aerial vehicle (ALTUS) with magnetic & electric field detectors and optical lightning sensors



ALTUS takes off with ACES payload during a test flight

- Data products
  - Electric & magnetic field
  - Atmospheric conductivity
  - Lightning morphology (optical and near-infrared)